



SOUTH CAROLINA FAMILY AND COMMUNITY LEADERS

Affiliated with
National Volunteer Outreach Network, Country Women's Council, U.S.A., Associated Country Women of the World
and in partnership with Clemson University Cooperative Extension Service

Go Green and Get Lean

Cutting calories, carbon dioxide can help save lives and the planet

Objectives:

1. Participants will understand the importance of going green.
2. Participants will describe the connection between nutrition, physical activity, and the environment.
3. Participants will identify strategies they can use to go green and get lean.

Advance Preparation:

Purchase a fresh apple and an apple pie from a fast food restaurant for use as lesson visuals.

Ask: Have you heard about the “Go Green” movement?

Show and Discuss:

I brought with me a fresh apple and an apple pie that I purchased at a fast food restaurant. Discuss the steps it would take to get the fresh apple from the tree to the consumer and what energy might be expended in doing so (the truck that would transport the apple to the grocery store, the gas you used to go to the store to purchase it, etc.) The energy expended could be reduced if you picked the apple yourself from a tree in your yard or if you purchased it from a local vendor at a farmer's market or roadside stand.

Next, discuss the steps that would be taken to get the apple pie from the tree to the consumer. The steps would involve not only shipping of apples, but would also include the processing of the pie, the packing materials, baking the pie, keeping the pie at the proper holding temperature in the restaurant, and your gas in going to the fast food restaurant to buy the pie.

Ask: Why do you think it is important to go green? What are you and others you know doing to go green?

Discuss with participants.

Say:

Environment/natural resources

According to the U.S. Census Bureau, the world population is expanding at a mind-boggling rate. The world reached 1 billion people in 1800; 2 billion by 1922; and over 6 billion by 2000. It is estimated that the population will swell to over 9 billion by 2050. That means that if the world's natural resources were evenly distributed, people in 2050 will only have 25% of the resources per capita that people in 1950 had.

The world has a fixed amount of natural resources - some of which are already depleted. So as population growth greatly strains our finite resources, there are fewer resources available. If we intend to leave our children and grandchildren with the same standard of living we have enjoyed, we must preserve the foundation of that standard of living. We save for college educations, orthodontia, and weddings, but what about saving clean air, water, fuel sources and soil for future generations?

Some of the greatest threats to future resources come from things we throw away every day. Household batteries and electronics often contain dangerous chemicals that may, if sent to a local landfill, leak through the bottom barrier and pollute the groundwater. This can contaminate everything from the soil in which our food grows, to the water which will eventually come out of aquifers and into our tap water. Many of these chemicals cannot be removed from the drinking water supply, or from the crops that are harvested from contaminated fields. The risks to human health are tremendous. Throwing away items that could be recycled diminishes energy, water and natural resources that could be saved by recycling.

Did you know...

For every ton of paper that is recycled, the following is saved: 7,000 gallons of water; 380 gallons of oil; and enough electricity to power an average house for six months.

You can run a TV for six hours on the amount of electricity that is saved by recycling one aluminum can.

By recycling just one glass bottle, you save enough electricity to power a 100-watt bulb for four hours.

Obesity epidemic

Childhood obesity is a serious health issue, with the prevalence reaching epidemic proportions and more than doubling in the last three decades. The prevalence of overweight in 6-11 year old children is 15.3% and 15.5% in adolescents 12-19 years old, with even higher rates among subpopulations of minority and economically disadvantaged children and adolescents. Children younger than 5 years across ethnic groups also have had significant increases in the prevalence of overweight.

The potential health and economic implications of the increasing prevalence of obesity is a serious health concern. The economic impact of obesity and associated chronic disease has been estimated to be approximately \$100 billion. Obesity in children and adolescents has been associated with several chronic disease states including: diabetes, asthma, sleep apnea, and gall bladder disease. Several studies document that prevalence of type II diabetes is increasing among children and adolescents.

Children who are overweight are at increased risk of becoming overweight or obese adults. The prevalence of adult obesity increased 75% between 1991 and 2000 (from 22.9% to 30.5%). Adult obesity is an important risk factor for several chronic disease conditions including: coronary heart



disease, selected cancers, type II diabetes, hypertension, sleep-breathing disorders, musculoskeletal disorders, and all-cause mortality.

Ask: What do you think the obesity epidemic and our environmental problems have in common?

Show and Discuss:

Show the apple and apple pie again. Remind the participants about the difference in energy expended to produce to get the products to the consumer. Then, discuss the fact that a regular fresh apple has approximately 40 calories and no fat. The apple pie would have between 250 and 400 calories and 15 to 20 grams of fat.

Say: America's obesity epidemic and environmental problems might not seem to have much in common. But public health experts suggest people can attack them both by cutting calories and carbon dioxide at the same time.

How? One strategy that is recommended is for people to get out of their cars and walk or bike half an hour a day instead of driving. That's one way Americans can simultaneously save the planet and their health.

Researchers estimate that if all Americans between 10 and 74 walked just half an hour a day instead of driving, they would cut the annual U.S. emissions of carbon dioxide, the chief greenhouse gas, by 64 million tons. About 6.5 billion gallons of gasoline would be saved. And Americans would also shed more than 3 billion pounds overall, according to these calculations.

The key is getting people out of the car. Reducing car travel in favor of biking or walking would not only cut obesity and greenhouse gases, they said, it would also mean less smog, fewer deaths from car crashes, less osteoporosis, and even less depression since exercise helps beat the blues. The average person walking half an hour a day would lose about 13 pounds a year. And if everyone did that instead of driving the same distance, the nation would burn a total of 10.5 trillion calories.

Ask: What other strategies could you do that could help you go green and get lean?

Give out Handout: Go Green and Get Lean. Discuss.



Go Green and Get Lean

Here are some simple things you can do today to help reduce your environmental impact, save money, and live a happier, healthier life.

1. Less gas = more money (and better health!)

Walk or bike to work. This **saves on gas** and parking costs while improving your cardiovascular health and reducing your risk of obesity.

Consider telecommuting if you live far from your work. Or move closer. Even if this means paying more rent, it could save you money in the long term.

Lobby your local government to increase spending on sidewalks and bike lanes. With little cost, these improvements can pay huge dividends in bettering your health and reducing traffic.

2. Buy local

We have heard the importance of eating seasonally, going organic or sustainable and reducing carbon footprints. Buying locally produced food accomplishes all these goals. Shopping your local farmers markets supports the local economy, supports family farms and, most importantly, provides the freshest produce you can buy. Many home cooks and restaurant chefs already know that local food is fresher and tastier. But there's another good reason to choose locally grown food. It's healthier for people and our planet. Produce that is flown or trucked in creates greenhouse gas pollution, which contributes to global warming and air pollution. According to NRDC, most produce in the United States travels an average of 1,500 miles before being sold.

Although local produce is sometimes more expensive than its supermarket equivalent, you're worth it. Sold shortly after being picked, local produce is not only fresher tasting, but will last longer, which means less waste. Markets also allow you to buy just what you need, which is great for singles or smaller families.

3. Eat Differently

Pre-packaged foods, fast food, and soft drinks are fast and convenient, but the production of these highly processed foods uses large amounts of materials and energy. These foods also tend to be high in fat, sugar, and calories. Choosing many foods from these areas, and consuming any food in excessive portions, contributes to overweight and obesity. Overweight and obese individuals are at increased risk for many diseases and health conditions, including high blood pressure, type 2 diabetes, coronary heart disease, and stroke. These conditions can increase the health risks posed by heat waves and extreme storms. The 2005 Dietary Guidelines for Americans is a resource to help people guide their dietary habits.



Healthier options include decreasing the amount of meat and other animal products you eat while increasing your consumption of vegetables and fruits. This is commonly referred to as eating lower on the food chain. These changes in eating habits help to decrease the amount of energy used to provide your food. Eating locally grown foods can also indirectly benefit your health. Food grown and produced far away requires transportation to reach the dinner table, eating locally saves energy by reducing the amount of fuel used to transport these products.

4. Eat Less Meat

The resources needed to raise livestock, including feed, water, fossil fuel and land, dramatically surpass those required for raising vegetables and grains. As concerns for profitability grew, the space used for raising animals shrank, which has resulted in animals being exposed to high levels of toxins from too many waste products in too small an area. Runoff from farms threatens crops grown nearby. On a more personal level, the health benefits of a plant-based diet can't be ignored. Heart disease and many cancers have a direct link to meat consumption.

Go meatless one or two days a week. Use meat as an accent instead of as a main course, adding it into stir-fries, soups or pasta dishes. Switch to grass-fed meat. Many grass-fed methods are more environmentally friendly and cost-effective. Many pastures for grass feeding utilize low-cost grasses that typically require little added water and few or no synthetic fertilizers and pesticides. Find local farms that treat their animals humanely. Substitute foods that simulate meat, such as soy products or portabella mushrooms, which mimic the texture and adaptability of steak.

5. Reintroduce yourself to your stove/oven

While this is not strictly a green issue, begin the year by breaking the cycle of subsisting on fast food, soft drinks and processed snacks. Replace those empty calories with nutrient-rich, home-cooked meals. By getting out of your car and eating a family dinner in your kitchen, you'll not only save gas and lessen pollution, but you will build a stronger foundation with your children, feel healthier and most likely lose weight.

The family can exert a strong influence on children's diet and food-related behaviors which, in turn, may impact their weight status. Research shows that the family meal has a significant impact upon the nutritional quality of children's diets. A higher frequency of family meals is associated with a greater intake of fruits, vegetables and milk, and a lower intake of fried foods and soft drinks. Family meals also can impact the development of language and literacy skills, and can generate a decrease in risk-taking behaviors.

Source: Written by Katherine L. Cason, Ph.D., RD, Professor, State EFNEP Coordinator, State Program Leader for Food Safety and Nutrition, Clemson University, Clemson, South Carolina.

